CITY OF NEWPORT BEACH

COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING DIVISION

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SWIMMING POOL & SPA
RESIDENTIAL
GENERAL NOTES

ENCLOSURE, BARRIER & DROWNING PREVENTION

1. Every pool and/or spa shall be fully enclosed by a fence or other barrier. Fence or barrier shall comply with the following:
   a. 5 ft or greater height above grade, measured from outside of the pool area.
   b. Minimum 45 inches spacing of horizontal members when placed on the outside of the fence.
   c. Maximum 4 inch spacing of vertical members.
   d. Decorative cutouts shall not exceed 1.75 inches wide.
   e. Maximum 2 inch vertical clearance between the bottom of the fence and grade, 4 inch maximum above concrete finish.
   f. Maximum 2.25 inch square chain link mesh, unless provided with slats fastened at the top and bottom which reduce the openings to 1.75 inches or less.
   g. Diagonal members shall form openings of 1.75 inches or less.
   h. Gates shall have self closing, and self-latching mechanisms. If the latch can be reached from outside the pool area, latch mechanism shall be at least 54 inches above the bottom of the gate.
   i. All gates shall swing out of the pool area.
2. A drowning prevention safety feature shall be provided when a dwelling wall serves as part of a pool/spa barrier, and doors from the dwelling provide direct access to the pool area. Identify the drowning prevention safety feature to be utilized for this pool installation. (**circle one**)
   a. Intermediate pool enclosure between the house and pool
   b. An ASTM Specifications F 1346 approved safety pool cover.
   c. Exit alarms on all doors providing direct access to the pool/spa.
   d. All doors providing direct access to the pool/spa area shall be equipped with a self-closing, self-latching device with a release mechanism placed at 54 inches or more above the floor.
   e. Permanently installed in-pool sonar alarm system certified to meet ASTM Std. F2208.
3. When installed, door alarms shall comply with the following:
   a. Alarm shall produce an audible warning when the door and/or its screen, are opened.
   b. The alarm shall sound continuously for a minimum of 30 seconds within 7 seconds after the door is opened, at a sound pressure level of not less than 85 dBA when measured inside the dwelling at 10 ft from the alarm.
   c. The alarm shall automatically reset under all conditions.
   d. The alarm shall be equipped with a manual means to temporarily deactivate the alarm for a single opening. The deactivation shall last not more than 15 seconds. The deactivation switch shall be located at least 54 inches above the threshold of the door.
4. If a drowning prevention safety system/device other than intermediate barriers, door alarms or self-closing devices will be used; complete the following information:
   a. Product Manufacturer: _____
   b. Product Name: _____
   c. Include installation and coverage diagrams on the plans.
   d. A copy of the ASTM testing agency approval letter shall be included on the plans.
5. Safety glazing is required in fences, doors and windows, where the glass is within 5 ft of the pool/spa edge and less than 60 inches above grade.

INSPECTION

1. Special inspection is required for shotcrete and gunite installation.
2. A sound test by an acoustical engineer is required to demonstrate that the noise level from the pump is less than 55 dBA at the property line. NBMC 10.26.025.
3. Encapsulated steel is required for all shell reinforcing and bond steel. Epoxy coated or similarly protected steel shall be used throughout the project, due to local soil conditions.

ELECTRICAL & HEATING SYSTEMS

1. Any walk surface within 5 ft of the pool edge shall be bonded, including unreinforced or landscaped areas.
2. Electrical outlets less than 20 ft from pool or spa shall be GFI protected.

3. All overhead power lines and other services shall comply with CEC 680.8.
4. Pool/spa heater vent shall be 4 ft away from property line
5. The following structures and equipment shall have electrical bonding: CEC 680.26
   a. pool shell reinforcing or metal shell;
   b. underwater lighting;
   c. metal fittings attached to pool structure;
   d. electrical equipment including pumps;
   e. motor electric pool covers;
   f. metal sheathed cables;
   g. metal piping less than 5 ft horizontally measured from inside pool wall;
   h. vertical structures less than 12 ft vertically above highest water level;
   i. steel reinforcing under adjacent walking surfaces; and,
   j. all structures or metal fences within 5 ft of the pool or spa.

PLUMBING, PUMPS & MOTORS

1. All pool or spa systems and equipment shall have the following:
   a. At least 36 inches of pipe between the filter and heater, or dedicated suction and return line, or built-in connection to allow for the future addition of solar heating equipment.
   b. A cover for outdoor pools or spas if a heat pump or gas heater is used.
   c. Pool shall have directional inlets to mix the pool water.
   d. The circulation pump must have a time switch that allows the pump to be set to run in the off-peak electric demand period for the minimum time required to maintain public health standards.
2. Pool pumps & motors: only those listed in the Commission's directory of certified equipment shall be installed.
3. Filtration flow rate shall not exceed that to turn over pool water volume in 6 hours or 36 gpm, whichever is greater.
4. Pump motors (for filtration) shall be multi-speed if capacity is greater than 1 hp.
5. Each auxiliary pool load (spa, water features, etc.) shall be served by a separate pump or multi-speed pump.
6. Multi-speed pump shall have controls that will default to the filtration flow rate when no auxiliary pool loads are operating.
7. Multi-speed pump shall default to the filtration flow rate setting within 24 hours.
8. Pool system piping:
   a. A straight pipe (min. length = 4 x pipe diameter) shall be installed before the pump.
   b. Pipe size shall be sized such that at maximum flow the velocity of the water is less than 8 fps in the return line and 6 fps in the suction line.
   c. All elbows shall be of sweep elbow or elbow-type that provides less pressure drop than straight pipe length of 30 pipe diameter.
   d. Pool filters shall be at least the size specified in NSF/ANSI 50.
   e. Backwash valve shall be same as return pipe diameter, but not less than 2" diameter.
   f. Pool/spa drain shall be connected to a "P" trap, which drains to the sewer system.
9. Pool/spa heating system shall be certified by the manufacturer for the following items:
   a. Thermal efficiency complies with Appliance Efficiency Regulations
   b. On-off switch mounted outside of the heater
   c. A permanent weatherproof instruction plate or card for energy efficient operation
   d. No electric resistance heating
10. Pool filters shall be at least the size specified in NSF/ANSI 50.
11. Backwash valve shall be same as return pipe diameter, but not less than 2 inch diameter.
12. Pool/spa drain shall be connected to a P-trap, which drains to the sewer system.
13. Waste water from any filter, scum filter, scum gutter, overflow, pool emptying line, or similar apparatus shall discharge into an approved type receptor and subsequently into a public sewer. The flood level rim of such receptor shall be at least 6 inches above the Base Flood Elevation (BFE) indicated in the Flood Insurance Rate Map as printed by the Federal Emergency Management Agency's, Flood Insurance Rate Map (FIRM) revision date December 3, 2009.
14. The new swimming pool/spa shall have at least two circulation drains per pump that shall be hydraulically balanced and symmetrically plumbed through one or more "T" fittings, which are separated by a distance of at least 3 ft in any direction between the drains.
15. Suction outlets that are less than 12 inches across shall be covered with anti-entrapment grates that cannot be removed except with the use of tools. Slots or openings in the grates or similar protective devices shall be of a shape, area, and arrangement that would prevent physical entrapment and would not pose any suction hazard to bathers.
16. Anti-entrapment grates shall comply with ASME/ANSI Std. A112.19.8